

### **REMARKS**

Claims 4, 9, and 21-36 are pending in the application. Claims 4, 9, and 36 have been allowed. Claim 23 is objected to, but would be allowed if rewritten in independent form. Claims 21-22 and 24-35 stand rejected.

#### **Claims 21, 24, 29, 32 and 35**

Claim 21 provides a method of forming "partially hemispherical surfaces" in endplates of confronting vertebral bodies and inserting a motion-preserving prosthesis therein. Claim 24 provides a method of inserting an intervertebral disc prosthesis by forming an indentation in an endplate of a vertebral body. The indentation has "a middle portion and a circumferential rim such that the middle portion is deeper into the first vertebral body than any part of the circumferential rim." Claim 29 provides a method of forming a surface that is "arcuate in multiple planes" in an endplate of a vertebral body and inserting a motion-preserving prosthesis therein. Claim 32 provides a method of "milling an endplate of the vertebral body to a relatively shallow thickness as compared to an overall thickness of the vertebral body" and inserting a motion-preserving implant therein. Claim 35 provides a method of "forming concave surfaces in the endplates of confronting vertebral bodies" and inserting an intervertebral disc endoprosthesis.

Independent claims 21, 24, 29, 32, and 35 stand rejected under 35 U.S.C. § 102 and/or § 103 as being unpatentable over Monson (USP 4,863,477) and Bainville (USP 5,674,294). This rejection is respectfully traversed.

Monson is silent about endplate milling or any of the other above-listed limitations of the independent claims. In fact, Monson preserves the vertebral body endplates because the endplates are used to frictionally engage with suction cup-like projections on the Monson prosthesis.<sup>1</sup> Since Monson is missing a limitation in each of independent claims 21, 24, 29, 32, and 35, it cannot be used as an invalidating prior art reference under 35 U.S.C. § 102.

Bainville teaches an implant with a compressible cushion 11 which inherently allows it to be

---

<sup>1</sup> Monson teaches inserting the implant and then inflating it so that it will conform to the endplates and that

compressed and inserted into the disc space. (col. 3, lines 33-37). Bainville does not teach or discuss any type of milling or endplate manipulation. Since Bainville is missing a limitation in each of independent claims 21, 24, 29, 32, and 35, it cannot be used as an invalidating prior art reference under 35 U.S.C. § 102.

Conclusion

Applicants submit that the claimed features are not only unique, but provide a significant advancement in the art. Therefore, claims 21, 24, 29, 32, and 35 are deemed to be in condition for allowance. Furthermore, claims 22-23, and 25-31, and 33-34 further limit their respective independent claims in a patentable sense, and provide further unique limitations when considering the claims as a whole.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,



David M. O'Dell

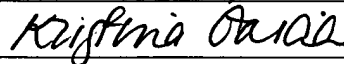
Registration No. 42,044

Dated: 10-24-05  
HAYNES AND BOONE, LLP  
901 Main Street, Suite 3100  
Dallas, Texas 75202-3789  
Telephone: 972/739-8635  
Facsimile: 214/200-0853  
Client Ref. No. PC904.08  
Doc. No. R-116388.1

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

on

October 24, 2005



Signature of person mailing paper and fee

---

suction cups on the surface of the implant will engage with the endplates. (See col. 1, line 66 – col. 2, line 8).